

WHAT IS CLAIMED IS:

1. A video recording apparatus, comprising:

a primary storage device which carries out ring buffer type recording;

5 a secondary storage device which is removable type;

a receiving device which receives a plurality of broadcasting video signals simultaneously;

a preference information detecting device which detects user's preference information;

10 a broadcasting program detecting device which detects broadcasting programs while assigning priorities to the broadcasting programs according to the preference information;

a secondary storage control device which detects, as  
15 archived recording programs, broadcasting programs having higher priorities among the priorities assigned by the broadcasting program detecting device, and acquires broadcasting video signals of the archived recording programs from the receiving device, and causes the  
20 broadcasting video signals to be recorded in the secondary storage device; and

a primary storage control device which detects, as regular recording programs, several broadcasting programs which may be received as broadcasting video signals by the  
25 receiving device among the broadcasting programs according to the priorities assigned by the broadcasting program detecting device, and acquires broadcasting video signals

of the regular recording programs from the receiving device, and causes the broadcasting video signals to be recorded in the primary storage device.

5     2.   The video recording apparatus according to Claim 1, wherein the broadcasting program detecting device includes an input device which accepts the broadcasting program which is designated by the user as a designated recording program, and

10         when the designated recording program has been accepted, the secondary storage control device detects the designated recording program as the archived recording program at the time of broadcasting the designated recording program.

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3.   The video recording apparatus according to Claim 1, wherein the primary storage control device detects the regular recording program for several amount of the broadcasting video signals which are capable of being  
20   received by the receiving device at the time when any one of the regular recording program ends.

4.   The video recording apparatus according to Claim 1, wherein the secondary storage control device includes a  
25   secondary storage schedule creating device which creates secondary storage schedule data of recording reservations with respect to the whole archived recording programs over

a predetermined period at a predetermined time, and an acquiring device which acquires the broadcasting video signals of the archived recording programs from the receiving device according to the secondary storage  
5 schedule data and causes them to be recorded in the secondary storage device; and

wherein the primary storage control device includes a primary storage schedule creating device which creates primary storage schedule data of recording reservations  
10 with respect to the whole regular recording programs over the predetermined period at the predetermine time, and an acquiring device which acquires the broadcasting video signals of the regular recording programs from the receiving device according to the primary storage schedule  
15 data and causing them to be recorded in the primary storage device.

5. The video recording apparatus according to Claim 4, wherein the primary and secondary storage schedule data are  
20 stored as a schedule database.

6. The video recording apparatus according to Claim 2, wherein when the designated recording program is newly accepted by the input device, the primary and secondary  
25 storage schedule creating device updates the primary and secondary schedule data.

7. The video recording apparatus according to Claim 1, wherein the secondary storage control device includes a determining device which determines whether a remaining recording capacity of the recording medium in the secondary storage device is equal to or below a specified value, and notifying device which notifies an exchange of the recording medium when it is determined that the remaining recording capacity is equal to or below the specified value by the determining device.

8. The video recording apparatus according to Claim 1, wherein the secondary storage control device stores the program information with respect to the archived recording program of which the broadcasting video signals are recorded by the secondary storage device as a secondary storage database; and

wherein the primary storage control device stores the program information with respect to the regular recording program of which the broadcasting video signals are recorded by the primary storage device as a primary storage database.

9. The video recording apparatus according to Claim 8, wherein the program information stored in the secondary storage database contains an identification code of the recording medium which was used for the recording at the secondary storage device.

10. The video recording apparatus according to Claim 1,  
wherein the primary storage device records the broadcasting  
video signal of the regular recording program by  
5 multiplexing it.

11. The video recording apparatus according to Claim 1,  
further comprising:

an instructing device which instructs the primary  
10 storage device to read the broadcasting video signals of  
any one of recording program of the regular recording  
programs which were recorded in the primary storage device  
as the broadcasting video signals; and

a providing device which provides the broadcasting  
15 video signals of the recording program, which has been read  
from the primary storage device, to a monitor for  
reproduction for display;

wherein the secondary storage control device causes  
the broadcasting video signals of the recording program,  
20 which has been read from the primary storage device, to be  
recorded in the secondary storage device.

12. The video recording apparatus according to Claim 1,  
wherein the broadcasting program detecting device includes  
25 an acquisition device which acquires the program  
information of each of the broadcasting programs; and an  
evaluation device which calculates the evaluation values

for each of the broadcasting programs according to the program information and preference information of the each broadcasting program, and assigns the priorities according to the order that the evaluation values are high to the  
5 each broadcasting program.

13. The video recording apparatus according to Claim 1, wherein the primary storage control device excludes the archived recording programs from the regular recording  
10 programs.

14. A method for controlling a video recording apparatus comprising a primary storage device which carries out ring buffer type recording, a removable type secondary storage  
15 device, and receiving device which receives a plurality of broadcasting video signals simultaneously, the method comprising:

a preference information detecting process for detecting user's preference information;

20 a broadcasting program detecting process for detecting broadcasting programs while assigning priorities to the broadcasting programs according to the preference information;

a secondary storage control process for detecting, as  
25 archived recording programs, broadcasting programs having higher priorities among the priorities assigned by the broadcasting program detecting device, acquiring

broadcasting video signals of the archived recording programs from the receiving device, and causing the broadcasting video signals to be recorded in the secondary storage device; and

5        a primary storage control process for detecting, as regular recording programs, several broadcasting programs which may be received as broadcasting video signals by the receiving device among the broadcasting programs according to the priorities assigned by the broadcasting program  
10    detecting device, acquiring broadcasting video signals of the regular recording programs from the receiving device, and causing the broadcasting video signals to be recorded in the primary storage device.